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(57) Abstract

The present invention relates a glutamate receptor of the AMPA-type which functions as a non-desensitizing AMPA-receptor or as a non-desensitizing subunit thereof, wherein the leucine corresponding to position 497 of the wildtype rat AMPA-receptor FluRflip, or the leucine at the equivalent position in other glutamate receptors of the AMPA-type, is replaced by an aromatic amino acid.